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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,310	12/31/2003	David P. Aschenbeck	25320A	1792
22889	7590	08/08/2007		
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			EXAMINER KRUER, KEVIN R	
			ART UNIT 1773	PAPER NUMBER
			MAIL DATE 08/08/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/749,310	<b>Applicant(s)</b> ASCHENBECK ET AL.	
	<b>Examiner</b> Kevin R. Kruer	<b>Art Unit</b> 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-18 and 23-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 19, 2007 has been entered.

### **Election/Restriction**

2. Claims 1-14 and 19-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 1, 2006.

### ***Claim Rejections - 35 USC § 112***

3. The rejection of claims 34 and 36 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement has been overcome by amendment.

4. The rejection of claims 34 and 36 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been overcome by amendment.

### ***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 14-18 and 23-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingram (US 3,084,059) in view of Kiik et al (6,585,813).

Ingram teaches an asphalt covered felt material (col 1, lines 20+) which has aggregate particles applied thereto. The size distribution of the particles is selected such that less aggregate is needed to cover the asphalt covered felt. The reduction in aggregate leads to a reduction in price (col 6, lines 9+). The aggregate size is selected according to the formula detailed in column 3, line 32+-column 4, lines 9+. Specifically, the only particles that will be present in the upper layer of asphalt is the largest aggregates with the majority of the aggregate being encapsulated within the asphaltic composition. Said particles are herein understood to read on the "first portion of granules" herein claimed. The examiner notes said aggregates contain no anti-microorganism granules.

Ingram does not teach applying a second portion of aggregates that are anti-microorganism. However, Kiik teaches surface covering asphaltic roofing shingles (abstract) with anti-microbial copper or tin particles (abstract). Said particles are applied such that they may enter part-way into the asphalt (0035), but desirably remain on the surface so that they remain active. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the antimicrobial particles taught in Kiik to the surface of the roofing shingle taught in Ingram. The motivation for doing so would have been to improve the anti-microbial properties of the shingle. Furthermore, it would have been desirable that all of said anti-microbial particles remain

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on the surface of the shingle such that they were not enveloped. The motivation for doing so would have been so that the particles remain active.

With regards to claims 18, 24, 25, 27, and 28, the examiner notes that said percentage of first and second portions of granules that are enveloped by the asphalt is a method limitation since said limitation does not limit in any way the percentage of granules that are enveloped in the final product. Specifically, the claim allows for an additional portion of granules (not the "first portion" or "second portion") to be applied to the roofing shingle. Said additional portion could have any percentage of granules enveloped. In the final product, the skilled artisan could not distinguish between the first portion and additional portion of granules.

Additionally, the examiner notes that the 5 component aggregate blend taught in Ingram reads on said claimed range because 33% of said aggregates are category 5 aggregates that will be as large as the asphaltic layer is thick. The 4 component aggregate blend taught in Ingram is also herein understood to read on the claimed percentage because 40% of said aggregates will be category 4 aggregates, thus leaving at least 60% enveloped. The examiner also notes that some of the category 4 aggregates will be enveloped (based upon the aggregate size range and asphaltic layer thickness teachings), thus teaching a layer wherein "about 70%" of said aggregates are enveloped.

With respect to claims 24 and 31, the examiner takes the position any coating will inherently meet said limitation since any amount of first portion of particles will constitute a first and second "predetermined percentage." Furthermore, said limitation is

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understood to be a method limitation that does not inherently result in a materially different product or distinguish the claimed product from the product taught in the prior art since it will be impossible to tell in the final product which particles were "first portion" particles and which were "second portion" particles. For the same reasons, the limitations of claim 25 are herein understood to be method limitations.

With regard to claims 34 and 36, the examiner takes the position that the particles taught in the applied references read on the claimed "background granules" because the granules of Ingram are taught to be colorful (col 1, lines 37+). Furthermore, said third portion is understood to be a method limitation because it is not deemed to result in a materially different product. Specifically, it is impossible to tell in the final product which particles were applied in which "portion." Similarly, the percentage of claim 25 is understood to be a method limitation because there is no way to tell in the final product which percentage of particles were coated as part of a "first," "second," or "third" portion.

With regard to the particle size of claims 23 and 37, the examiner takes the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the size of said particles in order to get the largest surface area per cost, while maintaining good adhesion and aesthetics. Said particle sizes are known in the art (see US 20050136216A, US 5,356,644, and US 2006/0204719A).

### ***Response to Arguments***

Applicant's arguments filed May 9, 2007 have been fully considered but they are not persuasive.

Applicant argues the combination of Ingram and Kiik failed to teach a shingle having deposited anti-microorganism granules and regular granules as part of a "second portion of granules." With respect to the "second portion" argument, the examiner maintains the position said limitation is a method limitation that does not patentably distinguish the claimed invention from the prior art. Applicant has failed to show that the claimed method limitations inherently result in a materially different product.

The examiner maintains the position that the product of Ingram coated with the anti-microbial granules of Kiik would comprise both anti-microbial and regular granules on the surface thereof. Thus, the claimed product would not be patentably distinguishable from the product rendered obvious by the prior art. Applicant has failed to show that applying the anti-microbial granules of Kiik would result in all the surface granules of Ingram being forced below the surface of the shingle.

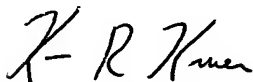
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kevin R. Kruer  
Patent Examiner-Art Unit 1773